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**TAB 3: WSDOT Actions Related to the Transportation
Performance Audit Board Graving Dock Review**

Status Update of WSDOT Actions Related to TPAB Review of Hood Canal Graving Dock Project

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Overview of Actions Related to TPAB Review

The Transportation Performance Audit Board's 2006 "Review of the Port Angeles Graving Dock Project" identifies lessons learned that can be incorporated into project procedures to minimize risks for future WSDOT projects. WSDOT has either implemented, is in the process of implementing, or has taken actions to address the underlying concerns of each the study's 31 recommendations.

The final report contains a number of recommendations specifically related to archaeological assessments and consultation with tribes. WSDOT has taken a number of steps over the past two years to improve its cultural resources program. The TPAB audit reinforced the need for these changes. The changes WSDOT has made and is making focus on:

- Providing explicit direction on how to comply with Section 106 of the National Historic Preservation Act, particularly in the early identification stages;
- Tightening the list of actions exempted from review under the National Historic Preservation Act;
- Increasing the level of agency oversight on scientific work conducted under the act to evaluate the potential impact of agency actions on historic properties;
- Ensuring well qualified consultants assist WSDOT in cultural resources work and that consultants use more sophisticated assessment tools;
- Improving tribal consultation to make sure tribes are contacted about projects and are meaningfully involved.

WSDOT and DAHP maintain ongoing relationships to discuss cultural resources issues:

- The Director of DAHP meets with WSDOT managers each month to ensure that cultural resources process issues are progressing smoothly.
- Cultural resources staff, including the DAHP Director, meet quarterly to discuss process and scientific requirements for cultural resource identification during projects.
- The Director of DAHP consults with the WSDOT cultural resources manager and WSDOT archaeologists on a weekly basis to review cultural resource identification requirements for various projects.
- DAHP transportation archaeologists consult with WSDOT archaeologists on a daily basis.

In addition, the review made recommendations related to project management, environmental permitting, and fiscal practices. WSDOT actions related to these recommendations are addressed in slides 11 - 14.

WSDOT's Recent and Pending Cultural Resources Process Changes

Action	TPAB Recommendations	Status	Detail
<p>Overall Compliance with Section 106 of the National Historic Preservation Act: Section 106 of the National Historic Preservation Act requires that federal funding or permitting agencies take into consideration the effects that their actions will have on historic properties (defined as properties eligible for listing on the National Register of Historic Places). Archaeological sites, historic structures, and traditional cultural places are examples of historic properties.</p>			
<p>Update the Section 106 Programmatic Agreement. The Programmatic Agreement represents an agreement between Federal Highway Administration, Dept. of Archaeology and Historic Preservation, Advisory Council on Historic Preservation and WSDOT. It provides direction on how WSDOT will comply with the National Historic Preservation Act. The existing Programmatic Agreement was signed in 2000. Revisions to the agreement are needed to:</p> <ul style="list-style-type: none"> ▪ Clarify the role of tribes as consulting parties in the Section 106 process; ▪ Clarify the application of the PA on tribal lands; ▪ Require cultural resources specialists to participate throughout the process; and ▪ Require semi-annual program review meetings and an annual assessment by FHWA and DAHP of Section 106 compliance actions taken by WSDOT. 	14, 21	In process, due December 2006	<ul style="list-style-type: none"> ▪ The needed revisions are contained in the draft revised Section 106 Programmatic Agreement.
<p>Update the Section 106 Programmatic Agreement list of exempted activities. Revisions are needed to bring the list up to date to reflect current activities and to tighten the applicability of exemptions. Specifically, the revisions:</p> <ul style="list-style-type: none"> ▪ Require cultural resources specialists to participate in determining whether an activity or project can be exempted; ▪ Clarify that an exemption may become inapplicable based on new information about the Area of Potential Effects or changes to the project; ▪ Add exemptions covering Washington State Ferries activities; ▪ Restrict exemptions in areas of prior disturbance; and ▪ Screen exemptions to preclude proximity/indirect effects to historic properties. 	14	In process, due December 2006	<ul style="list-style-type: none"> ▪ Expect draft Section 106 Programmatic Agreement to be signed December 2006.

WSDOT's Recent and Pending Cultural Resources Process Changes

Action	TPAB Recommendations	Status	Detail
Overall Section 106 Compliance, con't.			
Update procedures and standards for defining Areas of Potential Effects. The Area of Potential Effects is the geographic area or areas within which an action may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. Updated procedures to define Areas of Potential Effect were needed to clarify how those areas are to be established.	18, 20, 26	Completed, June 2006	<ul style="list-style-type: none"> ▪ This direction is established in the WSDOT <i>Environmental Procedures Manual</i> and is also contained as an exhibit in the draft revised Section 106 Programmatic Agreement.
Increase oversight of archaeology work to ensure that the work meets all the requirements of applicable laws and regulations; and to improve tribal consultation in order to make sure tribes are contacted about projects, and if they want to consult, that the consultation is effective and meaningful. In order to improve the capacity for oversight and improve consultation, WSDOT has added staff and tribal liaisons. Also, WSDOT, DAHP, and Parks & Recreation Commission hold Cultural Resources training twice a year in the field for government staff.	6, 13, 20	Completed	<ul style="list-style-type: none"> ▪ WSDOT has added 8 cultural resources specialists and 3 tribal liaisons since 2004.
Upgrade Section 106 compliance database. The database will be able to calculate timelines for completing actions and generate reports. Producing these reports will meet performance measures established by FHWA in the Revised Programmatic Agreement.		In process	<ul style="list-style-type: none"> ▪ To be completed by June 2007.

WSDOT's Recent and Pending Cultural Resources Process Changes

Action	TPAB	Recommendations	Status	Detail
<p>Cultural Resource Surveys: A cultural resource survey evaluates whether there are historic properties that will be affected by a particular action, and if so, identifies the type of effect. Cultural resource surveys include (1) a review of existing information on historic properties; (2) identification of previously unrecorded historic properties; (3) an evaluation of the eligibility of those properties for listing on the National Register of Historic Places; and (4) a discussion of the effects that an undertaking will have on them.</p>				
Refine the archaeology on-call consultant selection process. Ensure all firms have deep testing capability.	11	Completed, September 2006	<ul style="list-style-type: none"> ▪ All on-call consultants that were selected in September 2006 have deep testing capability. The selection process, including documentation of the process, responded to TPAB recommendations. 	
Provide more detailed guidance to both WSDOT cultural resources specialists and consultants on how to conduct a cultural resources survey, and on the content of the survey report, in accordance with the revised guidelines established by DAHP.	18, 27	Completed, June 2006	<ul style="list-style-type: none"> ▪ This direction is established in the WSDOT <i>Environmental Procedures Manual</i> and is also contained as an exhibit in the draft revised Section 106 Programmatic Agreement. Consultant scopes of work are now reviewed by WSDOT cultural resources specialists to ensure that the surveys address all potential effects to historic properties, and that the work is well-documented. 	
Develop a deep testing protocol for use in those areas of the state where cultural resources may be deeply buried (>1 meter) due to relatively recent geologic processes (e.g., earthquakes, alluvial action).	12, 19	In process	<ul style="list-style-type: none"> ▪ Synthesis of how other states are approaching deep testing was completed in July 2006; ▪ Scope of work for conducting research to develop the protocol is underway and should be completed by the end of 2006; ▪ Next step is to identify list of projects that are candidates for deep testing and to pursue project funding to do the research and complete the protocol; ▪ Develop list of projects by December 2006; ▪ Start protocol development by April 2007. 	

WSDOT's Recent and Pending Cultural Resources Process Changes

Action	TPAB Recommendations	Status	Detail
<i>Cultural Resource Surveys, con't.</i>			
<p>DAHP is developing a statewide applicability model for remote sensing/geophysical testing. WSDOT will be able to use the interactive computer model to determine the appropriate remote sensing methodology for the appropriate environmental setting.</p> <p>WSDOT and DAHP executive staff meet each month, and are joined by technical staff on a quarterly basis, to discuss various projects and challenges. These regular meetings keep lines of communication between the two agencies open and active.</p>		<p>In process, due 2007</p> <p>Ongoing</p>	<ul style="list-style-type: none"> ▪ The legislature appropriated funds in the most recent transportation budget to allow DAHP to develop this study.
<i>Consultation:</i> The National Historic Preservation Act requires consultation with Indian Tribes that attach religious or cultural significance to historic properties that might be affected by a transportation project. Consultation is the process of seeking agreement among affected parties regarding matters arising in the Section 106 process.			
<p>Negotiate Programmatic Agreements with those Tribes having Tribal Historic Preservation Officers to tailor consultation protocols, identify areas of interest, and develop inadvertent discovery plans.</p> <p>Develop model comprehensive tribal consultation process for WSDOT's NEPA work. The process will address cultural, historical, and environmental resources.</p>	22	<p>In process, due December 2007</p> <p>April 2007</p>	<ul style="list-style-type: none"> ▪ Draft programmatic agreements are in process with Colville, Squaxin, Makah, Lummi, Spokane, Skokomish and Yakama Tribes. ▪ Expect final agreements with Colville and Squaxin Tribes by June 2007. ▪ Finalize the remainder of agreements by December 2007. ▪ Met with cultural and natural resources staff at 27 of 29 federally recognized tribes to discuss the importance of consultation.

WSDOT's Recent and Pending Cultural Resources Process Changes

Action	TPAB Recommendations	Status / Detail
Better incorporate geology into archaeology investigations.		
<i>TPAB Recommendations:</i> Incorporate geology into archaeological investigations.		
<p>DAHP has revised its standards and guidelines for archaeology investigations. DAHP recommends that the professional archaeology community use the guidelines to meet the requirements of archaeological permits and to conduct archaeological site investigations. Without meeting these guidelines, DAHP will not be able to Certify that the work was sufficient. The new standards require the integration of geomorphology, substantial environmental and paleo- environmental assessment and a reporting of field conditions.</p> <p>DAHP received a transportation enhancement grant to do another phase of archaeology predictive modeling. The work will focus on areas in Western Washington with a focus on urban corridors projects. Funding isn't currently available to complete this mapping statewide.</p> <p>DAHP is in the process of completing a remote sensing study to correlate different remote sensing methods with environmental factors. This will give archaeologists a tool to determine which remote sensing method is most effective for locating archaeological sites in the project area. The study will conclude with a workshop for cultural resource specialists led by geoarchaeologists and geophysicists.</p>	23, 24, 25	<p>■Complete</p> <p>■Archaeological predictive model for western Washington areas should be completed by Fall 2007. Funding is not available for completion of the model statewide.</p> <p>■In process, due June 2007</p>
<i>TPAB Recommendation:</i> Improve cultural resources business practices.		
<p>The identity of principal investigators is included in cultural resources survey reports. WSDOT will modify its cultural resources survey scope of work template to include the Principal Investigator role.</p> <p>It is a standard business practice for signatories to an archaeological Memorandum of Agreement to be consulted and agree to any archaeological method changes to the agreement.</p>	28, 29	<p>■In process, due December 2006</p> <p>■Ongoing</p>

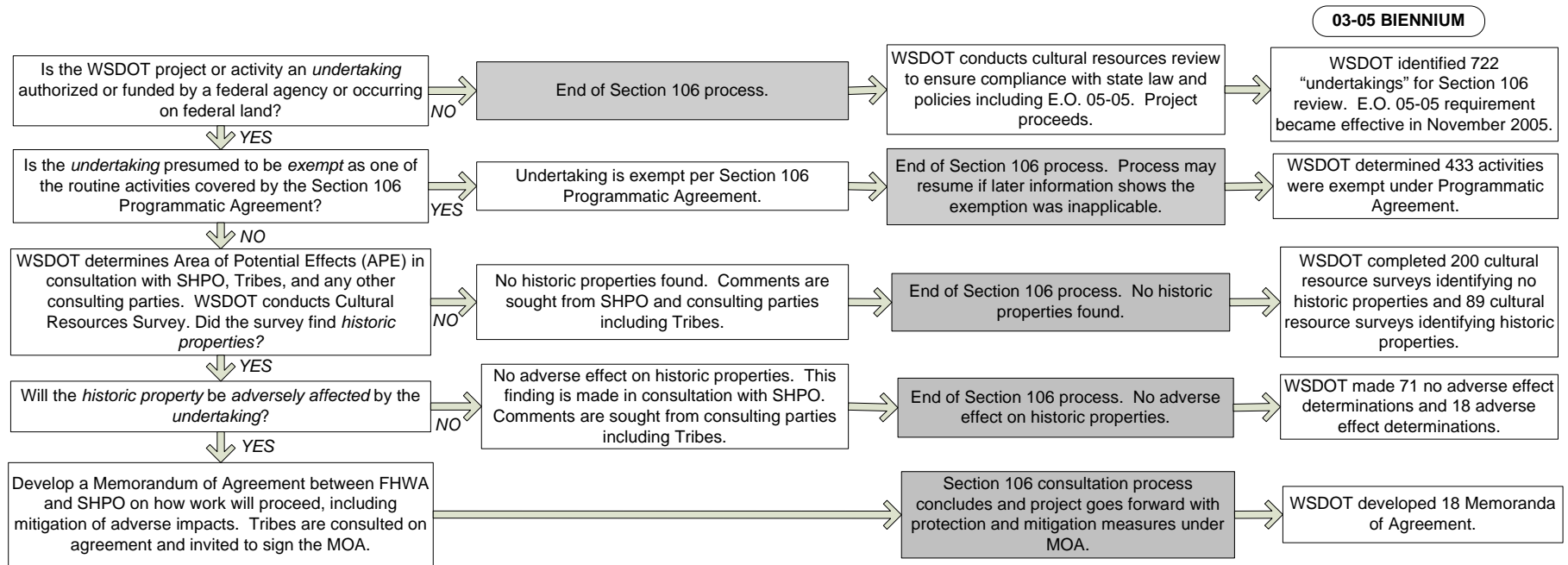
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Current Examples of WSDOT and DAHP Archaeological Methodology and Oversight

Project	Technologies used to evaluate the potential presence of cultural materials	Detail
Alaskan Way Viaduct	<p>Sonic Core (“vibracore” solid column) is a long tube that is vibrated into the ground that creates a column of soil. The soil column is examined to determine the presence/absence of cultural resources, and to identify potential depth of human occupation.</p> <p>Prior to the vibracore, WSDOT used cores that were rotated into the ground. The physical rotation caused the profile to be mixed or obscured. The vibracoring reduces or completely negates these problems.</p>	Six inch diameter Sonic Core sampling at regular intervals (33 ft. and 65 ft.) proposed to identify cultural resources and buried intact surfaces. Cores will be visually inspected and logged by professional archaeologists. Research design currently under internal review.
Mukilteo Multimodal Ferry Dock	Sonic Core (“vibracore” solid column) and backhoe.	Core sections and trench spoils containing observed shellfish fragments and/or artifacts were screened and inspected by professional archaeologists. Large shell midden site (including horizontal and vertical limits) and three historic-period structures were identified before construction and early in the environmental review process.
SR 520 Special Projects Construction Site	Sonic Core (“vibracore” solid column) and backhoe trenching. A GeoSlicer, a flat plane rectangle that looks like a window pane with a back, may be used to supplement coring. The GeoSlicer is vibrated into the ground. Then a front panel is inserted which captures the soil. Once the slicer is retrieved, the archaeologists can then examine the soil stratigraphy from a flat plane angle.	Cores will be used to construct landform evolutionary history, specifically looking for evidence of co-seismic subsidence (earthquake dropping) of ground surfaces. A positive finding would dramatically increase the likelihood of encountering large cultural resources. Cores will be logged by a professional geologist.

National Historic Preservation Act – Section 106 Consultation Process

Flow Chart



Definitions:

SECTION 106 – A section of the National Historic Preservation Act (NHPA) establishing a federal review process requiring agencies to take into account how their undertakings may affect historic properties.

UNDERTAKING – Refers to a project, activity, or program having a federal nexus, such as funding (in whole or in part) under the direct or indirect jurisdiction of a federal agency, including undertakings carried out by or on behalf of a federal agency.

EXEMPT – The statewide Section 106 programmatic agreement (PA) presumes certain WSDOT undertakings will not affect historic properties and are thus exempt from further Section 106 review.

HISTORIC PROPERTY - Any prehistoric or historic district, site, building, structure or object included in or eligible for inclusion in the National Register of Historic Places. This term includes artifacts, records and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe and that meet the National Register criteria. Eligible for inclusion in the National Register includes both properties formally determined as such and all other properties that meet the National Register criteria.

MEMORANDUM OF AGREEMENT - A legal document that is developed to resolve adverse effects to historic properties under Section 106. Involved parties must include the applicable federal agency and SHPO and may include WSDOT, Tribes, local government, and the Advisory Council on Historic Preservation (ACHP).

SHPO – State Historic Preservation Officer, a position established in each state by the NHPA. In Washington, this position is occupied by the Director of Department of Archaeology & Historic Preservation (DAHP).

FHWA – Federal Highway Administration. WSDOT conducts the Section 106 process on behalf of and in cooperation with FHWA.

CONSULTATION – The process of seeking agreement among affected parties regarding matters arising in the Section 106 process.

11/15/2006

Other WSDOT Actions Related to TPAB Review

- **Project Management and Process Improvements**
- **Environmental Permitting**
- **Fiscal Practices**

WSDOT Actions Related to Project Management and Process Improvements

Action	TPAB Recommendations	Status
<i>Project Management and Process Improvement</i> –TPAB’s audit recommended project management improvements. Note that the State Auditor’s Office is currently conducting an extensive performance audit of WSDOT’s current project management practices. The outcome of this audit could update several of TPAB’s recommendations.		
<i>TPAB Recommendations:</i> Improve project management practices in the areas of new initiative implementation, critical path scheduling, project manager training, HQ oversight, and project documentation.		
WSDOT’s July 2005 Executive Order 1032.00 on Project Management mandates a consistent process for project management and scheduling. The process includes training for project managers on critical path systems, cost risk assessments, the use of project development information systems and other measures to improve project management, reporting and control. WSDOT developed and offers 8 courses for project management. WSDOT is currently developing mandatory project management certification program that includes training, and experience such as participation in an upcoming Project Management Academy.	1, 2, 3, 7, 16, 17	Completed, July 2005
As a standard business practice, project managers manage projects overall, and technical experts are used as appropriate given the project particulars.		Project Management Academy, Spring 2007
WSDOT’s project control and reporting office monitors, tracks, and reports on delivery of capital construction projects statewide. The office led the process to select, and is integrated with, a construction team that increases agency capacity to ensure oversight of the capital program.		Ongoing
WSDOT executives conduct quarterly meetings with each region and mode to review proposed changes to project scopes, schedules, and/or budgets. This review process assures the regular, systematic monitoring and control of projects, early identification of potential and actual risks to projects, a forum for collaborating, and firsthand information for WSDOT headquarters.		Statewide Program Management Group selected, 2005
Regarding project documentation, WSDOT actively documents project progress as a standard business practice, and documents decision-making meetings.		Ongoing

WSDOT Actions Related to Project Management and Process Improvements and Environmental Permitting

Action	TPAB Recommendations	Status / Detail
<i>Project Management and Process Improvement, continued</i>		
<i>TPAB Recommendations:</i> Expand the use of consultants and improve the monitoring of their work.		
<p>WSDOT retained a consulting team as a Statewide Program Management group to develop an overall strategy for program delivery and reporting, and to help implement program management systems. This group will provide long-term independent oversight of project delivery and presents a new role for outside consultants within WSDOT.</p> <p>WSDOT is meeting the staffing needs associated with delivering the 2005 Transportation Partnership Account projects by using engineering consulting firms. In January 2006, WSDOT awarded 8 major contracts to consulting firms for planning, design, and program management.</p> <p>As a standard business practice, WSDOT monitors consultant's progress between major project milestones. WSDOT requires monthly progress reports for work conducted by consultants.</p>	5, 15	<p>Fall, 2005</p> <p>Completed, January 2006</p> <p>Ongoing</p>
<i>Environmental permitting</i>		
<i>TPAB Recommendations:</i> Several TPAB audit findings highlighted the need to incorporate natural resource issues earlier in project delivery, provide external leadership to permitting teams, and ensure appropriate expertise is included in permitting teams.		
<p>WSDOT has initiated a number of efforts to partner both within the agency and with other agencies. An example includes the Multi-Agency Permitting Team that consists of King County, Army Corps of Engineers, Ecology, and Washington Dept. of Fish and Wildlife. This is a co-located team that focuses on permitting transportation projects in the northwest part of the state.</p> <p>In 2004, WSDOT, FHWA, USFW& NMFS signed an agreement that allows WSDOT to directly consult with federal resource agencies, and also establishes an elevation process for resolving difficult consultations. This collaborative approach allows for the early identification of fisheries and other ESA concerns.</p> <p>WSDOT is not moving forward with providing external leadership to interagency permitting efforts. However, we are involving external expertise to build consensus between WSDOT and resource agencies. For example, this approach is being used on SR520. Also, WSDOT supports resource agency liaisons. This program was cited in TPAB's 2005 <i>Business Review Study</i> (p. 26) as an important factor in streamlining permitting by enhancing communication with permitting agencies.</p>	4, 8, 9 10	<p>Multi-Agency Permitting Team established, 2003</p> <p>July 2004</p>

WSDOT Actions Related to Improving Fiscal Practices

Action	TPAB Recommendations	Status / Detail
<i>Fiscal Review</i>		
<i>TPAB Recommendation:</i> Improve project financial reporting.		
<p>The Transportation Working Group report established agreement between WSDOT, the Legislature, and executive oversight bodies on reporting schedules and budget information for highway construction projects.</p> <p>WSDOT is currently pursuing a Project Management Reporting System which will allow us to use standard tools, such as earned value and cost-to-complete, as well as provide project delivery information to decision makers in a timely manner.</p>	Fiscal Review 1	<p>Completed, March 2006</p> <p>Ongoing</p>
<i>TPAB Recommendation:</i> Establish guidelines to ensure the appropriate application of economic analysis.		
<p>WSDOT has developed a cost risk assessment process (CRA) that is mandatory for all projects that exceed \$25 million, and for projects that exceed \$100 million, has developed the cost estimate validation process (CEVP). A WSDOT Executive Order requires risk assessments on all projects, regardless of size. Workshops on the use of these tools are available for all project managers.</p> <p>WSDOT also uses value engineering which has been successfully used on complex projects such as interchanges, major structures, new alignments, or projects with unusually high costs. Value engineering produced over \$62 million in cost avoidance on I-405 corridor expansions.</p> <p>http://www.wsdot.wa.gov/eesc/design/VE/</p>	Fiscal Review 2	<p>Ongoing</p> <p>Ongoing</p>

Recommendations from TPAB Review: 1 - 8

Recommendation 1 – Every new WSDOT process or improvement to an existing process should be accompanied by a mandatory implementation plan and followed by an evaluation plan.

Recommendation 2 – WSDOT should require the use of critical path scheduling of the project development processes used on complex projects.

Recommendation 3 – WSDOT should require all project managers to have project leadership, management and responsibility training.

Recommendation 4 – WSDOT should utilize “strategic partnering” to improve both intra- and inter-agency relationships.

Recommendation 5 – WSDOT should continue to expand the utilization of consulting firms for both project and program management.

Recommendation 6 – WSDOT should encourage and support the development of internal subject matter experts.

Recommendation 7 – WSDOT should develop greater project oversight by its headquarters’ design, project management, and construction services.

Recommendation 8 – WSDOT should incorporate ESA and fisheries considerations at the earliest possible opportunity for any transportation project with the potential for impact.

Recommendations from TPAB Review: 9 - 13

Recommendation 9 – WSDOT should promote stronger inter-agency permitting team leadership by finding someone who can not only provide a balance between the developer and regulator, but a focus for the overall team.

Recommendation 10 – WSDOT and other State agencies should scope early in the inter-agency permitting team set-up process for the expertise needed and secure these team members for the inter-agency permitting team via an active, ongoing and collaborative

Recommendation 11 – WSDOT needs to ensure that objectivity and fairness are maintained and that knowledgeable reviewers assess the On-Call Contract proposals. WSDOT should record the full names and positions of every evaluator. More importantly, documentation of the consultant selection process, including the consultant submittals and evaluator score sheets, must be retained in accordance with the State's retention schedules.

Recommendation 12 – WSDOT should add a geoarchaeology/geomorphology specialty, including deep site testing, to the list of services in the Cultural Resource On-Call Contract scope of work for two reasons— 1) to enhance the multi-disciplined approach to archaeology and 2) to reduce the chances of identifying significant resources late in the project, particularly during the construction phase, which could impact both the project budget and schedule.

Recommendation 13 – WSDOT should require continuing education and training for all their cultural resources specialists to ensure continuation of the Department's core competency. This training should be taken through the Advisory Council on Historic Preservation (ACHP), the National Highway Institute (NHI), or other qualified institution (e.g., university).

Recommendations from TPAB Review: 14 - 18

Recommendation 14 – WSDOT should require their project managers to contact their Cultural Resources Program for all of their Section 106 compliance issues. Have a WSDOT cultural resources expert review the project, scope of work, and Area of Potential Effect (APE) before the project is completely designed, and consult early with stakeholders.

Recommendation 15 – WSDOT should implement methods to monitor a consultant's progress between major project milestones.

Recommendation 16 – WSDOT should divide management tasks between a project manager and technical expert on large and complex projects.

Recommendation 17 – WSDOT should have a standard protocol for project documentation that includes writing monthly summaries and recording meeting minutes.

Recommendation 18 – WSDOT should provide a detailed written description of the Area of Potential Effect (APE) to the consultant, and require that a detailed scope of work be submitted from the consultant as part of their proposal back to WSDOT. Any subsequent changes to the APE should be formally documented and discussed with regulatory agencies, Section 106 consulting parties, WSDOT's in-house experts, and WSDOT's archaeological consultant(s) performing the work.

Recommendations from TPAB Review: 19 - 22

Recommendation 19 – WSDOT should continue to develop deep-site testing protocols to lessen the chances of missing a buried site in the future.

Recommendation 20 – WSDOT should initiate Section 106 consultation early because consultation lies at the core of the Section 106 process. Detailed project information and project changes, such as changes to the APE, need to be submitted to the SHPO as well as tribes, and other federal agencies and stakeholders to maintain an informative dialogue. Meeting minutes should be taken and distributed to the consultants and other stakeholders for eliciting further comments, making corrections, and for future reference should disputes or other needs arise.

Recommendation 21 – WSDOT should consider coordinating with the FHWA to revise WSDOT's Programmatic Agreement to help ensure that FHWA meets its responsibilities for undertakings pursuant to Sections 106 and 110 of the National Historic Preservation Act; and that these changes should include several key stipulations that are based on current best practices promoted by other state DOTs and FHWA divisions.

Recommendation 22 – WSDOT should continue to pursue the implementation of a formal plan as required by the Millennium and Centennial Accords signed by both the State of Washington and the State of Washington's federally recognized tribes. WSDOT has already developed a formal plan as outlined in Executive Order 1025.00 and we recommend that they continue to build on this plan as they continue to implement procedural Programmatic Agreements with tribes living in or having ancestral homelands in Washington. WSDOT should consider coordinating with the FHWA when and where possible with continuing to develop procedural Programmatic Agreements with tribes who have ancestral homelands in Washington and live in or outside of the state.

Recommendations from TPAB Review: 23 - 27

Recommendation 23 – The DAHP and possible interested stakeholders such as WSDOT should adopt or amend a set of guidelines for the application of geology in all archaeological investigations and evaluations. Trained earth scientists should be required or highly recommended in all phases of archaeological investigations. The DAHP, should revise the archaeological guidelines and standards on how to perform fieldwork, laboratory work, and report writing. Geologic field work and documentation both need to be standardized between projects that are presented to the DAHP.

Recommendation 24 – WSDOT, FHWA, and DAHP should work together to secure resources (funding and labor) to help produce some standardized geologic mapping/modeling across areas that are expected to have a large developmental need for archaeological surveys in the next five to ten years

Recommendation 25 – DAHP and consulting archaeologists should begin a dialog with geologists knowledgeable of Washington to discuss interpreted areas of high potential for deeply buried sites.

Recommendation 26 – WSDOT, when defining the Area of Potential Effect on behalf of the lead federal agency, needs to consider what the impacts are to an archaeology site if subjected to vibration, settling/compaction, liquefaction, stress-strain, shearing, dewatering, flooding, oxidation, etc., caused by the undertaking. An archaeologist, other pertinent technical experts, and the SHPO and THPO, need to be consulted on the possible effects that might take place at and to the “site” given a set of circumstances predicted by the designers.

Recommendation 27 – WSDOT should require well-documented and standardized field notes, maps, figures, progress reports, final reports, etc. of their archaeological consultants.

Recommendations from TPAB Review: 28 – 29 and Fiscal Review Recommendations

Recommendation 28 – Future WSDOT projects should identify a lead Principal Investigator (e.g., federally qualified archaeologist) and define his/her role in detail.

Recommendation 29 – WSDOT should make certain that signatories to an archaeological Memorandum of Agreement are consulted and agree to any archaeological method changes in writing.

Summary of Recommendations – JLARC Fiscal Review

Recommendation 1 – WSDOT should continue its efforts to improve the financial reporting structure for transportation projects so that in the future, project budget and expenditure information is presented in a format that is consistent and meaningful to decision-makers and the public.

Recommendation 2 – WSDOT should establish and implement policies and guidelines for the appropriate application of different levels of economic analysis for proposed projects, including benefit-cost analysis, depending on the type and complexity of the proposed project.